

ACCESSION NR: AP4041044

ENCLOSURE: 01

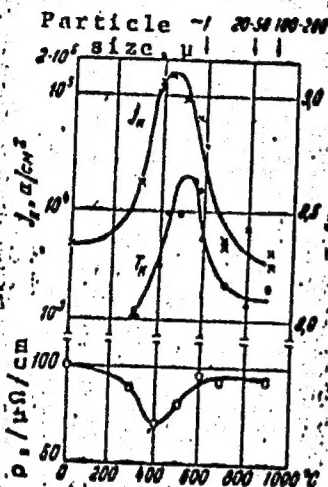


Fig. 1. Dependence of j_K and T_K on annealing temperature (annealing time 1 hr) for Nb + 80% Zr alloy (magnetic field 27 oe)

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ACCESSION NR: AP4041044

ENCLOSURE: 02

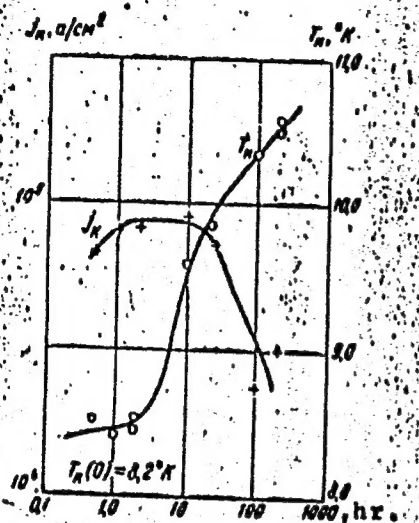


Fig. 2. Dependence of J_K and T_K on annealing time at 570°C Nb + 80% Zr alloy (magnetic field 27 oe)

EDP(c)/2/EWP(z)/EWT(1)/EWT(m)/EWP(h)/EWA(d)/EWP(1) PL-4 IJP(c) WW/

... state of the ...
... containing ...

... experimental nov i reparation ... 1966,

... conductivity, zirconium base alloy, ... alloy,
... party

ABSTRACT: A detailed study was made of the effect which the structural state of an alloy has on its superconducting and mechanical properties. The following properties were measured: electrical resistance, critical temperature, critical current density as a function of the orientation of the magnetic field with respect to the

APSCOR 738

A relationship is found between
... solution during appealing

ins. art. cas.

... alloy

Card 2/2

GONCHAROV, I.N.

[An 85 kgs superconducting magnet made of Nb-75% Zr]
Sverkhprovodiashchii magnit iz Nb - 75% Zr na 85 kgs.
Dubna, Ob"edinennyi in-t iadernykh issledovani, 1965.
13 p. (MIRA 19:1)

L 24240-66 EWT(m)/EPF(n)-2/T/EMP(t) IJP(c) JD/MM/JG
ACC NR: AP6014612

SOURCE CODE: UR/0386/66/003/009/0365/0369

AUTHOR: Goncharov, I. N.; Khukhareva, I. S.

ORG: Joint Institute of Nuclear Research (Ob'yedinennyy institut yadernykh issledovaniy)

TITLE: Anomalous behavior of the critical current of heat-treated alloys of Nb + 75% Zr as functions of the field and temperature

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 9, 1966, 365-369

TOPIC TAGS: niobium alloy, zirconium alloy, temperature dependence, critical point, Curie point, superconductivity, critical magnetic field, metal heat treatment

ABSTRACT: The authors have investigated the critical current $j_c(H, T)$ of wires of 0.18--0.29 mm diameter, made of Nb-75% Zr alloy annealed for one hour at 400- 500C, as functions of the magnetic field and the temperature, and observed marked deviations in behavior from the predictions of the phenomenological model proposed by P. W. Anderson (Phys. Rev. Lett. v. 9, 309, 1963). The measurements were made in the temperature interval from 1.5K to the Curie point T_c in a transverse magnetic field up to 80 kG. In strong fields $j_c(T)$ is linear, but in weaker fields its character changes, and starting with some temperature a deviation from linearity is observed. At still lower values of T , saturation sets in; the lower the magnetic field, the higher the temperatures at which deviation and saturation occurs. When the investigated samples are sufficiently thick (0.25--0.29 mm in diameter) $j_c(H, T)$

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I 24240-66

ACC NR: AP6014612

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becomes unstable, principally in medium fields and at temperatures lower than a fixed value that depends on the field and on the wire diameter. The instability decreases when the wire diameter is reduced below 0.19--0.22 mm. The possible causes of these anomalies are briefly discussed. The measurements at temperatures from 4.2K to T_c were made in collaboration with M. Litomski and I. Ruzicka of the Czechoslovak Institute of Nuclear Research. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 08Mar66/ ORIG REF: 003/ OTH REF: 007

Card 2/2 dda

L 35545-66

EWI(m)/EWP(w)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/JW/HW/GD

ACC NR: AT6014748

SOURCE CODE: UR/0000/65/000/000/0044/0052

AUTHORS: Bychkov, Yu. F.; Goncharov, I. N.; Khukhareva, I. S.

ORG: none

TITLE: The effect of the structural state on the superconducting properties of zirconium alloys with 20--25% Nb

SOURCE: Soveshchaniye po metallovedeniyu i metallofizike sverkhprovodnikov. 1st, 1964. Metallovedeniye i metallofizika sverkhprovodnikov (Metallography and physics of metals in superconductors); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 44-52

TOPIC TAGS: superconductivity, superconducting alloy, zirconium base alloy, niobium containing alloy, shear modulus, internal friction, resistivity, tensile strength, hardness, magnetic field

ABSTRACT: The results of a study of the effect of various metallurgical factors on the superconducting properties of zirconium alloys containing 15--25% niobium are given. In order to determine the structural changes that occur during the tempering of cold-worked alloys, the shear modulus G , internal friction Q^{-1} , resistivity ρ , the critical temperature of the superconducting transition T_k , tensile strength σ_B , hardness HV, and relative elongation δ were measured. The ingots were smelted in an arc furnace in an argon atmosphere. The starting materials were zirconium iodide and

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ACC NR: AT6014748

refined niobium. Ribbon with a thickness of 0.25 mm and wires with a diameter of 0.25 mm were prepared. The most important consequences of intermediate tempering of alloys with 20--25% Nb at 400-550C are a sharp increase in J_k , a comparatively weak dependence of J_k upon the applied magnetic field, and an almost complete absence of anisotropy of the critical current density in the region of separation of the ω -phase (see Fig. 1). Annealing at 400--500C reduces the number of point and line flaws. The value of T_k for alloys with 5--35% Nb was determined by the change in the magnetic moment. The dependence of T_k upon the temperature of one-hour tempering was also studied (see Fig. 2). The authors thank V. Ya. Fil'kin for the wire samples, A. P. Korostelev for producing the apparatus, and V. F. Chumakov for help with the measurements.

Card 2/4

L 38545-66

ACC NR: AT6014748

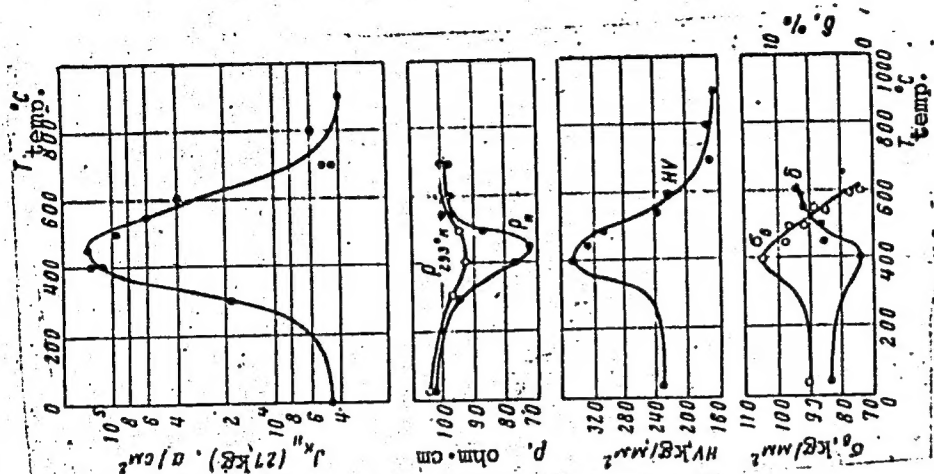
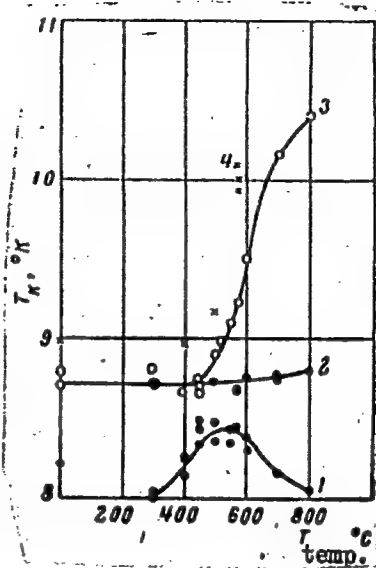


Fig. 1. Physical properties of Zr alloy with 20% Nb. J_k and ρ after intermediate tempering with subsequent cold working by 95%; σ_B , δ , and HV in stage of intermediate tempering (without subsequent deformation) as function of tempering temperature for one hr.

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ACC NR: AT6014748

Fig. 2. T_k as function of temperature of one-hour tempering: 1, 2 - intermediate tempering (strip, for 20% Nb and 25% Nb, respectively); 3 - final tempering (wire, 25% Nb); 4 - intermediate tempering on diameter of 0.5 mm with subsequent deformation to diameter of 0.25 mm (wire from another batch, 25% Nb).



Orig. art. has: 1 table and 5 graphs.

SUB CODE: 11, 20/ SUBM DATE: 23Dec65/ ORIG REF: 010/ OTH REF: 013

Card 4/4 END

L 36868-66 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) WW/JD/JG

ACC NR: AT6023736

(A)

SOURCE CODE: UR/2755/66/000/005/0044/0050

10
69
B+1

AUTHOR: Bychkov, Yu. F.; Goncharov, I. N.; Khukhareva, I. S.

ORG: none

TITLE: Effect of oxygen additions on the structure and superconducting properties of Zr-Nb alloys

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metallurgiya i metallovedeniye chistykh metallov, no. 5, 1966, 44-50

TOPIC TAGS: zirconium alloy, niobium containing alloy, oxygen containing alloy, superconducting alloy, alloy structure, alloy hardness, ~~alloy superconductivity~~
CURRENT DENSITY, OXYGEN

ABSTRACT: An investigation has been made of the effect of oxygen additions on the critical current density (j_c) in Zr-Nb alloys, and on the β -solid solution/decomposition which changes the magnitude of j_c . Electron-beam melted zirconium alloys containing 33 wt% Nb and 0.02-0.04 wt% O_2 were preformed at 800-900C and cold rolled into a strip 1 mm thick which was annealed at 900-950C, in oxygen, homogenized in vacuum at 1300C for 1.5 hr, and cold rolled to a thickness of 0.5 mm with process annealing at 500, 570 or 700C for 1 hr, and then cold rolled into 0.05 mm foil without process annealing. The oxygen content in the foil varied from 0 to 1.0%. The critical current density (j_c) was measured in a magnetic field with an intensity, H,

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L 36868-66

ACC NR: AT6023736

of up to 27 oe parallel to the direction of rolling. It was found that alloying with up to 0.04 wt% O₂ had practically no effect on the magnitude of j_c ; the dependence of j_c on H was the same as for alloys without oxygen. With oxygen content increasing from 0.1 to 0.25 wt%, the magnitude of j_c in specimens rolled without process annealing more than doubled and reached 4×10^4 a/cm² in a field of 27 oe. The effect of oxygen was even more pronounced in foil rolled with process annealing, in which case the j_c of specimens containing 0.25% oxygen and annealed at 700C reached 1.5×10^5 amp/cm². Thus, the j_c of Zr-base alloys can be significantly increased by alloying oxygen especially when cold deformation is followed by process annealing. Additions of oxygen substantially increased the hardness of alloys, although the hardness remains lower than that of niobium and niobium-base alloys. It appears that alloys with 25—35% Nb permit larger oxygen additions than the Nb-base alloys because of a smaller effect of oxygen on their ductility. The hardness of an alloy containing 33% Nb and 0.25% oxygen remained practically unchanged with annealing at 700C, but decreased by 20 units in an alloy containing 26% Nb and 0.04% oxygen. Oxygen additions also caused separation of the β -solid solution into two solid solutions with a different concentration of the α -phase. The higher j_c in oxygen-rich alloys can be explained by the presence of finely dispersed inclusions with poor superconducting properties in the superconducting matrix, in particular, α -Zr inclusions with $T_c = 0.6K$ which stabilize magnetic flux lines. Orig. art. has: 4 figures and 1 table. [MS]

SUB CODE: 11, 09/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 008/ ATD PRESS: 5040
superconducting alloy

Card 2/2 MLP 18

GONCHAROV, I. P.

20857. Goncharov, I. P. i Shupakovskiy, V. F. Kul'tura klevra kaasnogo v uzbekistane.
Sots. sel. Khoz-vo Uzbekistana, 1949, No. 1, s. 15-19.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

PROKOPCHUK, G.P., kand.tekhn.nauk; CONCHAROV, I.P., inzh.

Increasing the efficiency of four-row cone roller bearings.
Mashinostroenie no. 2:23-24 Mr-Apr '64. (MIRA 17:5)

GONCHAROV, I.P., agronom; SABIROV, U. Sh., inzh.- gidrogeolog

Regime of ground waters during the irrigation and reclaiming
and bringing under cultivation of Solonchak soils in central
Fergana Province. Gidr. i mel. 16 no.12:3-10 D '64
(MIRA 18:2)

1. Golodnostepskaya gidrogeologicheskaya stantsiya.

BASKIN, B.M.; UTIN, I.A.; GONCHAROV, I.P.; FROKOPCHUK, G.P.

Reconditioning couplings of automatic pipe rolling mills.
Metallurg 10 no.5:29-30 My '65. (MIRA 18:6)

1. Azerbaydzhanskiy truboprokatnyy zavod i Khar'kovskiy
politekhnicheskiy institut.

GONCHAROV, I. S.

Electrical Engineering Abstracts
May 1954
Machines.

1882. Calculation of the direct-axis flux linkages of the cross-magnetizing armature reaction of non-compensated d.c. machines. I. S. GONCHAROV. *Elektrichestvo*, 1953, No. 7, 41-5. In Russian.

It is sometimes necessary in investigating various operating conditions of d.c. machines to consider the non-linear relation between the direct-axis flux linkages of the cross-magnetization and current and voltage of the machine. The classical method, based on the magnetic characteristic of the active layer of the machine whose area has to be determined with a planimeter, is very laborious. The method presented by the author is based on the use of the simplest formula for parabolic integration of the area under the transient characteristic. This enables the direct component of the cross-magnetization to be found as a function of load current and flux density; the flux-weakening by the cross-magnetizing armature reaction may also be determined. The method may be carried out either graphically or analytically. Curves for the approximate determination of the effects mentioned are also presented.

B. F. KRAUS

SOV/137-57-6-9848

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 76 (USSR)

AUTHOR: Goncharov, I.S.

TITLE: Submerged Remelting of Aluminum-alloy Swarf in Crucible Furnaces (Pereplavka struzhki alyuminiyevykh splavov v tigel'nykh pechakh pod sloyem flyusa)

PERIODICAL: V sb.: Rats. ispol'zovaniye struzhki i dr. otkhodov chernykh i tsvet. metallov. Moscow, Mashgiz, 1956, pp 403-411

ABSTRACT: A recommended process procedure for remelting Al-alloy swarf under the shop conditions existing at machinery plants is adduced. Before melting, the scrap is freed of foreign bodies (rags, ceramics, iron, steel, and bronze parts) by hand sorting. The scrap and swarf is then dried in ordinary mold and core bakers, as well as in the air at room temperature. The iron crucible of the furnace is first charged with the flux (45% CaCl_2 or KCl , 40% NaCl , and 15% CaF_2), which is fused and heated to 750°C . The scrap is charged into the fused flux, large pieces first. If there are none, swarf and other small scrap is charged batch-wise and is shoved down to the bottom of the crucible, energetic stirring being maintained. The

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SOV/137-57-6-9848

Submerged Remelting of Aluminum-alloy Swarf in Crucible Furnaces

amount of flux used in remelting should come to 20-30% of the weight of the charged swarf, depending upon contamination and degree of oxidation. The molten metal yield is 82.3% (not counting moisture content and impurities). When the swarf moisture content is 12.5%, the yield of molten metal is 94.8%. Metal losses in melting are 5.2%.

G.S.

Card 2/2

BABICHEV, V.Z.; GONCHAROV, I.S.

~~The status of producing radiators from aluminum and its prospects.~~
Avt. i trakt. prom no. 11:37-39 N '56. (MLRA 10:1)

1. Moskovskiy avtozavod imeni Likhacheva, Nauchno-issledovatel'skiy
institut Avtomobil'noy promyshlennosti.
(Automobiles--Radiators)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516010009-9

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000516010009-9"

VALETOV, V.V.; VESNIK, M.I.; GONCHAROV, I.S.; DMITROV, D.V.; LUNEV, A.A.;
POKIN, M.I.; NESTEROV, S.N.; SMIRNOV, V.P.; ALEKSEYEV, S.A., re-
tsenzent; KARKAZOV, A.G., retsenzent; KONDRATOVICH, V.M., retsen-
zent; LEVIN, B.M., retsenzent; MALIKOV, A.N., retsenzent; SEGAL-
VICH, S.M., retsenzent; SHPAGIN, A.I., retsenzent; SHTERN, L.T.,
retsenzent; YAKOBI, A.A., retsenzent; TIKHANOV, A.Ya., tekhn. red.;
CHERNOVA, Z.I., tekhn. red.

[Establishing norms for the consumption of materials in machinery
manufacture; manual] Normirovanie raskhoda materialov v mashino-
stroenii; spravochnik. Pod red. V.V.Valetova. Moskva, Gos. nauchno-
tekhn. izd-vo mashinostroit. lit-ry. Vol.1. 1961. 583 p.
(MIRA 15:2)

(Machinery industry)

KARYAKINA, M.I.; GONCHAROV, I.S.

Pneumatic combined stationary and portable device for determining
the degree of chalking of paint coatings. Lakokras. mat. 1 ikh
prim. no. 4:60-62 '63.
(MIRA 16:10)

GONCHAROV, I. V.

Stoyushkin, I. A. I. Goncharov, I. V.
No. 37394--Lushcheniye sterna uborochnolu shchil'nyy agregatcm. v 3b: za
vysokuyu kpl'turu samledeliya. Dursk, 1949, s. 54-61.

u z k

So: Letopis' Ahurnel'nykh Statey, Vol. 7, 1949.

~~7-5-56~~ GONCHAROV, I.V.

TOLCHINSKIY, Yefim Moiseyevich, inzh.; SHTEYNBOK, G.Yu., inzh, vedushchiy
red.; DAL'TSOV, A.N., glavnyy red.; GONCHAROV, I.V., red.;
PONOMAREV, V.A., tekhn.red.

[The IPD-2 photoelectric recorder of pressure] Fotoelektricheskiy
registrator davlenii IPD-2. Moskva, Filial In-ta nauchnoi i tekhn.
inform., 1956. 15 p. (Pribery i stendy. Tema 4, no.P-56-517)
(Pressure gauges) (MIRA 11:2)

GONCHAROV I.V.

SPITSYN, Vikt.I., akademik; PCHELKIN, V.A.; GONCHAROV, I.V.

Effect of surface active agents on the solution kinetics of calcium carbonate in mineral acids. Dokl.AN SSSR 137 no.5:1158-1161 Ap '61. (MIRA 14:4)

(Surface active agents) (Calcium carbonate)
(Solution (Chemistry))

KRUG, Yelena Karlovna, kand. tekhn. nauk; SHIROCHENSKIY, Sergey
Ivanovich, inzh.; MORDVINOVA, N.P., inzh., ved. red.;
GONCHAROV, I.V., kand. tekhn.nauk, red.; PONOMAREV, V.A.,
tekhn. red.

[Contactless control device with impulse control of the
executive motor] Beskontaktnoe reguliruiushchee ustroystvo s
impul'snym upravleniem ispolnitel'nyim dvigatelem. Moskva,
Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 9 p.
(Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt.
Tema 42. No.P-58-47/4) (MIRA 16:2)
(Automatic control) (Electric controllers)

KANEVSKIY, Ye. I.; GONCHAROV, I. V.; RENGEVICH, V. B.

Kinetics of oxidation of U(IV) by atmospheric oxygen in carbonate solutions. Radiokhimiya 7 no.5:579-585 '65.

Catalytic action of copper ammoniate during oxidation of uranium dioxide by atmospheric oxygen. Ibid.:585-589

(MIRA 18:10)

I. YA. GONCHAROV AND V. P. TYCHINSKIY

"Investigation of the Conductivity of the Space Charge Cloud of a
Magnetron" from Annotations of Works Completed in 1955 at the State Union Sci. Res.
Inst. Min. of Radio Engineering Ind.

So: B-3,080,964

SHTEYNBERG, Aleksandr L'vovich, inzh.; SHTEYNBOK, G.Yu., inzh., ved.
red.; GONCHAROV, I.V., kand. tekhn. nauk, red.; SOROKINA, T.M.,
tekhn. red.

[Upe-1 unit] Ustanovka UPE-1. Moskva, Filial Vses. in-ta nauchno-
tekhn. informatsii, 1958. 8 p. (Peredovoi nauchno-tekhnicheskii
i proizvodstvennyi opyt. Tema 34. No.P-58/10) (MIRA 16:2)
(Electronic instruments)
(Electric instruments—Testing)

S/167/60/000/004/001/003
A006/A001

AUTHORS: Sharipkulov, R. S., Bannykh, O. A., Goncharov, I. Ye., Zudin, I. F.,
Linchevskiy, B. V., Prokoshkin, D. A.

TITLE: The Effect of Chromium¹ and Manganese¹ on Phase Transformations¹⁶ of
Chrome-Manganese Steels¹⁸

PERIODICAL: Izvestiya Akademii Nauk UzSSR, Seriya tekhnicheskikh nauk, 1960,
No. 4, pp. 62-69

TEXT: In developing chrome-manganese stainless steels by replacing the nickel by manganese, investigations into structural phases had been carried out previously by A. V. Shultin, F. F. Khimushin, F. M. Becket (Ref. 1, 2, 7); G. V. Estulin (Ref. 3); A. T. Grigor'yev, D. L. Kudryavtsev (Ref. 4, 6) and foreign scientists (Ref. 8-10). In the present article information is given on the effect of manganese and chromium on phase transformations in steel. In a 12-kg induction furnace, 16 alloys with different chromium and manganese content and one chrome-nickel alloy containing Ti were melted. Changes in hardness after water quenching at 800, 900, 1,000, 1,100 and 1,200°C were studied. The dependence of the hardness on temperature is shown in Table 3. After quenching

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A006/A001

The Effect of Chromium and Manganese on Phase Transformations of Chrome-Manganese Steels

the specimens were subjected to an analysis of the microstructure. The steels were tempered at 650, 700, 750 and 800°C. Changes in H_{RR} , depending on the tempering time of steels with 17% Cr, quenched at 1,100°C are given in Table 4. The connection of a possible δ -phase formation and higher hardness was determined by investigating the magnetic properties of the steel. Specimens of all steel melts were analyzed on an M. S. Akulov type anisometer at 20°C, after tempering at 750°C for 10 hours. The amount of a ferromagnetic phase was determined for various steel grades. Dilatometrical analysis was made on chrome-manganese specimens quenched at 1,100°C with subsequent annealing at 750°C for 10 hours. Curves of temperature versus linear expansion for three grades of steel with 10% Cr were plotted (Fig. 2). A phase analysis was made of precipitates out of an electrolyte on saturated potassium chloride base with addition of 5 to 50 mg/l hydrochloric acid and 5 to 25 g/l citric acid at a current density of 0.6 - 1.0 amp/cm² and a temperature not over 20°C. A copper cylinder was used as a cathode. 9 to 12 mm specimens were placed into a collodion bag filled with 100 - 130 ml of the filtrated electrolyte. The precipitates were

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A006/A001

The Effect of Chromium and Manganese on Phase Transformations of Chrome-Manganese Steels

separated from the electrolyte, washed and dried at 100°C in hydrogen atmosphere for 20 to 30 minutes. Roentgenograms were taken of the dried precipitates with a РКД (RKD) camera on Cr radiation without using a filter. Exposure time was 13 to 18 hours. A chemical analysis was made of precipitates separated out of 4 steel grades in an electrolyte composed of 250 g/l potassium chloride, 5 mg/l hydrochloric acid, 5 g/l citric acid, 0.6 - 0.8 amp/cm² current density and 18 - 22°C inside the collodion bag. The investigations performed yielded the following results: At a content of 11% Mn, independent of the chromium content, the steel contains in its structure austenite as well as ferrite. It is not possible to convert the steel into the austenitic state by heat treatment. Steel with 16 - 22% Mn and 8 - 10% Cr has a $\gamma + \epsilon$ -structure at temperatures below 140 - 210°C and an austenitic structure at a temperature over 210°C. The presence of the ϵ -phase was not observed in steel with 27% Mn. In steels with 13 and 17% Cr, independent of the manganese content, the structure is composed of ferrite and austenite after quench-hardening at a temperature over 900°C. The amount of ferrite in the steel group with 17% Cr is considerably higher than

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S/167/60/000/004/001/003
A006/A001

The Effect of Chromium and Manganese on Phase Transformations of Chrome-Manganese Steels

that of steels with 13% Cr. After heating to 600 - 900°C, the ferrite is decomposed and the δ -phase is formed (except X13Г11 (Kh13G11)¹ and X17Г11 (Kh17G11)² steels). Steels with 17 and 13% Cr contain carbide of the $Me_{23}C_6$ type which may be expressed by the formula (Fe, Mn, Cr)₂₃C₆. There are 5 tables, 2 figures and 11 references, 6 Soviet, 2 English and 3 German.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy AS USSR)
Gornyy otdel AN UzSSR (Mining Department of AS UzbekSSR)

SUBMITTED: December 23, 1959

Card 4/4

GONCHAROV, I. YE.

Jr. Sci. Collaborator, Uzbek Sci. Res. Veterinary Inst., -c1949-.

"Treatment of Theileria Annulata in large Horned Cattle (with Novoplasmin;
Bioquinine and Sulfantrol), " Uzbek Nives, 1949;
0

SO: MIRA

GONCHAROV, I. YE.

Res/medicine - Cattle, Diseases
Veterinary Medicine Apr 49

"Comparative Evaluation of the Action of IP-2,
IP-4, Piroplasmic, and Flavacrin," I. Ye.
Goncharov, Jr Sci Collaborator, Uzbek Sci Res
Vet Inst, 3 pp

"Vet" No 4

In experimental piroplasmicosis produced in large
horned cattle by *P. biguttatus*, hemospurium
(IP-2) and novoplasmin (IP-4) proved to be good
substitutes for piroplasmic (aspirin) and
flavacrin (trypelavine). Flavacrin gave
the best results in "frangulosis" (Fr.
66/49155

USSR/Medicine - Cattle, Diseases Apr 49
(Contd.)

colchicine) but IP-4 in hypodermic injections was
also effective. Best results were obtained with
IP-2 and aspirin.

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USSR/Veterinary - New Drug

Jul 53

"The Effectiveness of Aminoquinacrine in Theileriasis of Cattle," I.E. Goncharov, F.F. Pergat, A.M. Stepanov, Vet Physicians

Veterinariya, No 7, pp 27-28

Describes exptl application of a minoquinacrine (A5) in the treatment of Th. annulata of cattle. Used in the primary stages of the disease, the drug did not control the progress of parasitic development or fever. The administration of the 3rd and 4th intravenous doses of 0.0035g per one kg of live weight frequently produced a severe reaction. A

273T62

comparison table of the final effects of an intravenous administration of A5 and an intramuscular administration of sulfantrhol shows closely similar results.

GONCHAROV, I.Ye.

~~Symptomatic therapy of theileriasis of cattle.~~ Veterinariia 30
no.3:35-36 Mr '53.
(MLRA 6:3)

GONCHAROV I. Ye.

USSR/Diseases of Farm Animals. Diseases Caused by Protozoa.

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12283.

Author : Goncharov, I. Ye., Kleymenov, K. G., Fedorchenko, V. V.,
Kobenko, S. P.

Inst : Daghestan Institute of Agriculture

Title : Experimental Uses of ASD FR-2 in Theileriosis of
Large Horned Cattle. (Preliminary Report).

Orig Pub: Tr. Dagest. s.-kh. in-ta, 1955, 6, 25-26.

Abstract: In cases of theileriosis and in cases of a mixed
invasion of theileriosis and piroplasmosis, ASD
FR-2 was intravenously administered in a 25 percent
solution of a 0.7-1.0 ml/kg dose with a simultaneous
hypodermic injection of a 10 percent caffeine solution
in the usual dose. The preparation was administered
during the clinical stage of the disease. Of the

Card : 1/2

GONCHAROV I. Ye.

USSR/Diseases of Farm Animals. Diseases Caused by Protozoa.

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12278.

Author : Goncharov I. Ye.

Inst : Daghestan Farm Institute

Title : Large Horned Cattle Resistance to Hemosporodioza

Orig Pub: Tr. Dagest. s.-kh. in-ta, 1956, 6, 17-23.

Abstract: Reaction differences in animals of various breeds during their infection period were elucidated with regard to piroplasmosis, fransaiellosis, and theileriosis. The experiments were carried out at a sovkhos in Uzbekistan on young cattle of four different breeds. Among the local group of young animals and blends of local zebulike and bushuyev breeds 16.6 percent

Card : 1/4

USSR/Diseases of Farm Animals. Diseases Caused by Protozoa.

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12278. **APPROVED FOR RELEASE: 06/13/2000** CIA-RDP86-00513R000516010009-9"

were seriously ill with piroplasmosis; however, all of them had only mild forms of fransaiellosis and theileriosis. The following percentages of gravely ill animals were established: in the bushuyev group - with piroplasmosis, 47 percent; with fransaiellosis, 23.5 percent; and with theileriosis, 15.8 percent; in the East-Frisian group - with piroplasmosis, 82 percent; with fransaiellosis, 61 percent; and with theileriosis, 33.3 percent; in the Swiss group - with piroplasmosis, 100 percent; with fransaiellosis, 85.7 percent; and with theileriosis, 44.4 percent. The comparative study of certain clinical and hematological indicators in animals suffering from severe and mild forms of fransaiellosis, as well as gaseous interchange

Card : 2/4

USSR/Diseases of Farm Animals. Diseases Caused by
Protozoa.

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12278.

indicators and subdivisions, has shown substantial differences as to the character of indicator changes, depending on the gravity of the illness. In animals afflicted with the mild form of the disease, the changes in morphological and biochemical blood indicators are slower and usually less intense than those observed in severe forms. The type of thermoregulation in healthy animals, possessing a higher resistance towards fransaiellosis, coincides with the type of thermoregulation in animals who have developed resistance to the hot climate. Animals whose growth and development took place in hot climatic conditions where hemosporodioza are widely spread, have milder forms

Card : 3/4

USSR / Diseases of Farm Animals. Diseases Caused by Protozoa. R

Abs Jour : Ref Zhur - Biol., No 22, 1958, No 101350

Authors : Goncharov, I. Ye.; Danilova, V. M.; Zolotova, A. S.

Inst : Not given

Title : Using Vitamin B₁₂ for Treating Anemia Caused by Theileriasis in Cattle.

Orig Pub : Veterinariya, 1958, No. 3, 34-38

Abstract : In experimentally treating 10 cows, vitamin B₁₂ concentrates containing 80 % of active substances per 1 ml. of concentrate were used. The preparation was subcutaneously injected into cows weighing 250 to 350 kilograms in 1 - 1.5 ml. doses in 4 - 5 ml. of water per each injection. The treatment proved successful, as was demonstrated by the resulting increase of the hemoglobin content in erythrocytes, by normalization of hemogenic processes, and,

Card 1/2

GONCHAROV, I. E. and MYALOK, I. I.

"Methods of control of blood-sucking insects on the farms in the Amir district."

Veterinariya, Vol. 37, No. 6, 1960, p. 71

Cent. Vet. Sci. - Dal'nevostochnyy NIVI

MYALOK, I.I., kand. veter. nauk; GONCHAROV, I.Ye., kand. veter. nauk

Controlling blood-sucking insects on Amur Province farms.
Veterinariia 37 no.6:71-73 Je '60. (MIRA 16:7)

1. Dal'nevostochnyy nauchno-issledovatel'skiy veterinarnyy
institut.

(Insect baits and repellents)

GONCHAROV, I. Ye., kand. veterin. nauk; MYALO, I. I., kand. veterin. nauk;
GORODOVICH, N. M., veterin. vrach

Sprayer with a hand pump. Veterinariia 40 no.10:62 0'63.

(MIRA 17:5)

1. Dal'nevostochnyy nauchno-issledovatel'skiy veterinarnyy
institut.

GONCHAROV, K.A.

Creper and a mechanism for rolling down paper. Bum. prom. 34
no.11:20 N '59. (MIRA 13:3)

1.Inshener-konstruktor Koryukovskoy fabriki tekhnicheskikh bumag.
(Koryukovka--Papermaking machinery)

GONCHAROV, K.A.

Brush-trimming machine tool. Bum.prom. 34 no.12:17 D '59.
(MIRA 13:4)

1. Koryukovskaya fabrika tekhnicheskikh bumag.
(Paper industry—Equipment and supplies)

BARSKIY, Moisey Rafailovich, kand. tekhn.nauk; GLUSHKOV,
Mikhail Tikhonovich, inzh.; GONCHAROV, Konstantin
Borisovich, inzh.; ZALESSKIY, Lev Grigor'yevich,
inzh.; LALETIN, Geryat Pavlovich, inzh.; LYNKYUK,
Leonid Savvovich, inzh.; KAPUSTIN, L.D., red.

[The ER9 electric train] Elektropoezd ER9. [By] M.R.
Barskii i dr. Moskva, 1964. 239 p. (MIRA 18:1)

GLUSHKOV, M.T.; GONCHAROV, K.B.

ER7 a.c. powered electric train. Elek.i tepl.tiaga 5 no.4:22-28
Ap '61. (MIRA 14:6)

1. Glavnyy inzhener spetsial'nogo konstruktorskogo byuro Rishskogo
vagonostroitel'nogo zavoda (for Glushkov). 2. Zamestitel' glavnogo
inzhenera spetsial'nogo konstruktorskogo byuro Rishskogo
vagonostroitel'nogo zavoda (for Goncharov).
(Electric railroads—Trains)

GONCHAROV, Konstantin Fedorovich [deceased]; TSAR'KOV, V., red.; VORON-
KOVA, Ye., tekhn.red.

[Reinforced concrete construction foremen; Assembly workers on
construction sites] Mastera zhelezobetona; Montazhniki na stroike.
Penza, Penzenskoe knizhnoe izd-vo, 1958. 37 p. (MIRA 13:3)
(Reinforced concrete construction)

GONCHAROV, K.E.; DOBROBORSKIY, S.A.; SIDOROV, P.N.;
KOROSTASHEVSKIY, R.V.; KABANETS, Ya.P.; GROMYKO, Ye.M.;
KARASIK, P.I.; GAZAROV, L.A.; YAKHIN, B.A.; GORIN,
N.V., red.; POLYANSKAYA, Z.P., tekhn. red.

[Ball and roller bearings; catalog and handbook] Shariko-
vye i rolikovye podshipniki; katalog-spravochnik. Izd.2.,
ispr. i dop. Moskva, 1963. 379 p. (MIRA 17:3)

1. Moscow. Tsentral'nyy institut nauchno-tekhnicheskoy in-
formatsii po avtomatizatsii i mashinostroyeniyu. 2. Nauchnyye
sotrudniki Vsesoyuznogo nauchno-issledovatel'skogo konstruk-
torsko-tekhnologicheskogo instituta podshipnikovoy promysh-
lennosti (for all except Gorin, Polyanskaya).

GONCHAROV, K. G.

KLYUYEV, N.I.; GONCHAROV, K.G.

Automatic pneumatic stopcocks for compressed air distributing
systems. Prom:energ. 12 no.6:16 Ja. '57. (MIRA 10:7)
(Compressed air)

S/089/68/010/001/014/020
B006/B063

21.4250

AUTHORS:

V'yugov, P. N., Goncharov, K. S., Demantiy, V. S.,
Mandrichenko, A. M.

TITLE:

Attenuation of Gamma Radiation by Concrete and Certain Soils

PERIODICAL:

Atomnaya energiya, 1960, Vol. 10, No. 1, pp. 76-79

TEXT: The costs of shielding are of great significance for linear accelerators on account of their big size. It was therefore of great interest to find out to what extent earth, sand, or clay besides concrete could be suitably applied to obtain effective protection against gamma radiation. In this "Letter to the Editor", the authors report on studies of the attenuation of Co^{60} gamma radiation by earth, sand, and clay whose chemical composition is given in Table 1. The following experimental arrangement was used:

4

Card 1/2

V'YUGOV, P.N. [V'iyuhov, P.M.]; GONCHAROV, K.S. [Honcharov, K.S.];
DEMENTIY, V.S.

Manufacturing α - and β -sources for the graduation of dosi-
metric apparatus. Ukr. fiz. zhur. 6 no.2:284 Mr-Apr '61.

(MIRA 14:6)

1. Fiziko-tekhnicheskiy institut AN USSR.
(Alpha rays)
(Beta rays)
(Radiation—Measurement)

GONCHAROV, K. S.; KLYUCHAREV, A. P.

"The Energy Spectra of Alpha Particles in Reactions of Type (p,α) ."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22
Feb 64.

KhFTI (Ukrainian Physico Technical Inst, Khar'kov)

GONCHAROV, K. V.

GONCHAROV, K. V. --"Electric Thermal Oscillations (Fluctuations) of Piezoelectric Crystals." *(Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Moscow Order of Lenin and Order of Labor of Red Banner State U imeni M. V. Lomonosov, Moscow, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 55

* For the Degree of Doctor of Physicomathematical Sciences

GONCHAROV, K. V. and KRASIL'NIKOV, V. K., Docent

"Electric Thermal Oscillations (Fluctuations) of Piezoelectric Crystals,
a paper delivered at the Section of Radiophysics, Physics Faculty, Conference on
Radiophysics, Moscow State U., 10-14 May 1955, Vest. Mosk. U., Ser. Fiz-Mat. i Yest.
Nauk, No. 6, 1955.

SO: Sum 900, 26 Apr 1956

GONCHAROV, K. V.

G

USSR / Electricity

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9661

Author : Goncharov, K.V., Krasil'nikov, V.A.

Inst : Not given

Title : Thermal Mechanical Oscillations (Fluctuations) of Piezo-electric Crystals.

Orig Pub : Izv. AN SSR, Ser. fiz., 1956, 20, No 2, 231-236.

Abstract : Investigations of thermal noises in piezoelectric resonators made of Rochelle salt, ammonium phosphate, and barium-titanate ceramics have shown that the noise spectra have peaks at the natural frequencies of the resonators. A setup for the study of this effect does not differ in principle from setups used to investigate thermal noise of conductors and is capable of measurement accuracy of 15 -- 20%. Comparison of the experimentally-determined frequency dependences of the active component of the electric

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06/13/2000

CIA-RDP86-00513R00051601

GORCHAROV, K. V.

"The Influence of a Matching Layer on the Frequency Characteristics of
Piston-Type Piezoelectric Transducers."

"On the Measurement of Shear Wave Attenuation by Water-tank Method."

papers presented at 4th All-Union Conf. on Acoustics, Moscow, 26 May - ⁴ Jun 58.

AUTHOR: Goncharov, K. V.

46-4-1-6/23

TITLE: Theory of Piezoelectric Transducers (K teorii p'yezopreobrazovateley.)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol.IV, Nr.1, pp.37-46. (USSR)

ABSTRACT: The author deals with piezoelectric transducers used in ultrasonic delay lines by solving the wave equation and without the use of equivalent circuits. Fig.1 shows the system considered. It consists of a source I and a receiver II. A transducer 2 is a piezoelectric plate in which piston-type or shear vibrations are produced by applying an electric field between electrodes 5. Between the transducer 2 and an acoustic line 1 there is a layer 3 of a substance which produces acoustical contact between the transducer and the line. In some cases another plate 4 may be placed on the external side of the transducer. Matching with the electrical side is achieved by means of appropriate circuits. A 3-sided piezoelectric transducer is discussed, and expressions for transducer sensitivity first obtained by Kharkevich (Ref.3) are

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Theory of Piezoelectric Transducers.

46-4-1-6/23

deduced in terms of electrical impedances. Frequency characteristics are obtained for matching of piezoelectric quartz plates of X-cut with steel, aluminium, fused quartz and magnesium. The effect of the contact (or matching) layer δ as a function of its thickness and acoustical properties is considered. The discussion given in this paper is applicable to solid, liquid and gaseous media used in the acoustic line. The acoustic line medium is considered to be of infinite extent since the dimensions of the working surfaces of the piezoelectric transducer and the width of the acoustic line are assumed to be much greater than the acoustic wavelengths in the transducer and in the line. Under such conditions the wave near the transducer may be regarded as a plane wave, and the diffraction scattering of the ultrasonic beam in the acoustic line can be neglected. The discussion applies strictly to the case of piston-type vibrations only. The author thanks V.A. Krasil'nikov for his advice and help. There are 4 figures and 4 references, 3 of which are American and 1 Soviet.

Card 2/3

Theory of Piezoelectric Transducers.

46-4-1-6/23

ASSOCIATION: Chair of Acoustics, Moscow State University
(Kafedra akustiki Moskovskogo gosudarstvennogo
universiteta.)

SUBMITTED: March 27, 1957.

1. Piezoelectric transducers--Theory

Card 3/3

GONCHAROV, K. V. Cand Phys-Math Sci -- (diss) "Frequency characteristics of ^{converters} piezo~~transformers~~ and the spectra of their thermal noises." Mos, 1959. 16 pp with graphs (Mos State Univ im M. V. Lomonosov), 100 copies. Bibliography at end of text (14 titles) (KL, 45-59, 143)

SOV/46-5-1-20/24

AUTHOR: Goncharov, K.V.

TITLE: On the Possibility of Studying the Frequency Dependences of Transducer Sensitivities by Spectral Analysis of Their Thermal Noise (O vozmozhnosti izucheniya chastotnykh kharakteristik chuvstvitel'nosti preobrazovateley putem spektral'nogo analiza ikh teplovykh shumov)

PERIODICAL: Akusticheskiy Zhurnal, 1959, Vol 5, Nr 1, pp 120-122 (USSR)

ABSTRACT: The current (R_I) and voltage (R_V) sensitivities of a transducer can be expressed in terms of the modulus of electrical impedance $|Z|$, the real part of impedance $\text{Re}Z$, the efficiency η and the coefficient of concentration Ω .

$$R_V = \frac{P}{V} = \frac{1}{|Z|} \left[\frac{\eta \Omega}{k-C} \text{Re}Z \right]^{1/2}; \quad R_I = \frac{P}{I} = \left[\frac{\eta \Omega}{kC} \text{Re}Z \right]^{1/2}. \quad (1)$$

where $C = E_I/R_I = E_V/R_V$ and E_I and E_V are sensitivities under the conditions of an open circuit and a closed circuit respectively. The quantities k and C can be calculated and consequently the determination of sensitivity reduces to the finding of Z , Ω and η . To find the frequency dependence of sensitivity, Ω and η may be assumed to be constant

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SOV/46-5-1-20/24

On the Possibility of Studying the Frequency Dependences of Transducer Sensitivities
by Spectral Analysis of Their Thermal Noise

and only the frequency dependences of Z and $\operatorname{Re} Z$ need be found. The latter quantities were obtained using automatic apparatus for recording of spectral composition of thermal noise of transducers, since the author and Krasil'nikov (Ref 4) have shown that the spectral distribution of thermal noise is proportional to $\operatorname{Re} Z(\nu)$ where ν is the frequency. The thermal noise analyser was based on the two-channel circuit of Voyutskiy (Refs 5, 6) which uses commutation for compensation of the noise of the input stages of amplifiers. The instrument was calibrated by using thermal noises of known resistances. Since the spectral density of the thermal noise of the input cascade was found to be practically independent in the region of frequencies employed (4-100 kc/s), the author did not use the second amplifier channel and commutation. He compensated the noise of the input cascades by means of a constant voltage. Fig 1 shows a spectrogram of the thermal noise of a cylindrical hydrophone made of barium titanate and polarized tangentially. Fig 2 shows the frequency characteristics of voltage sensitivity of three cylindrical hydrophones made of barium titanate and tested under open-circuit conditions. Curves a were obtained assuming the concentration coefficient $\hat{\Omega} = 1$ and the efficiency $\eta = 100\%$. Curves b were obtained by means of the reciprocity method, described by

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SOV/46-5-1-20/24

On the Possibility of Studying the Frequency Dependences of Transducer Sensitivities by Spectral Analysis of Their Thermal Noise

Furduev (Ref 1), Carstensen (Ref 2) and Sabin (Ref 3), in anechoic rooms, or using pulses. If more realistic values of the concentration coefficient Ω are used and the efficiency η is taken as 14, 8 and 50% for the first, second and third hydrophones respectively, new frequency characteristics of sensitivity (curves ϵ in Fig 2) are obtained. The latter are very close to the curves obtained by the reciprocity method. If Ω is known the calibration method described in the present paper makes it possible to find both the frequency characteristic of sensitivity and the efficiency of a transducer. Acknowledgment is made to V.A. Krasil'nikov and L.M. Brekhovskikh for advice and to A.A. Anan'yeva who supplied the hydrophones. There are 2 figures and 6 references, 4 of which are Soviet and 2 English.

ASSOCIATION: Kafedra akustiki Moskovskogo gosudarstvennogo universiteta (Chair of Acoustics, Moscow State University)

SUBMITTED: November 15, 1957

Card 3/3

AUTHOR: Goncharov, K.V.

SOV/46-5-2-21/34

TITLE: On the Measurement of Shear-Wave Attenuation Using a Water Tank (Ob izmerenii zatukhaniya sdvigovykh voln po metodu vodyanoy vannoy)

PERIODICAL: Akusticheskiy zhurnal, 1959, Vol 5, Nr 2, pp 244-245 (USSR)

ABSTRACT: The apparatus for the study of shear-wave attenuation in a water tank is shown in Fig.1. Longitudinal waves produced by a radiator 1 are transformed into shear waves in a sample 2 by interaction with the sample faces V and G. Multiple reflections between the faces A and B and interactions at V and G cause the ultrasonic shear wave to pass many times between V and G. Adjustment of the sample with respect to the radiator 1 is necessary to obtain strictly horizontal direction of propagation of shear waves and the best conditions for transmission after a given number of passages in the sample. A transducer and an oscillograph are used to record shear waves, and a typical record is shown in Fig.2. After

Card 1/3 allowing for the losses on the reflection and transformation

SOV/46-5-2-21/34

On the Measurement of Shear-Wave Attenuation Using a Water Tank

and the losses in the longitudinal wave between A and V and between P and B, the remaining losses are taken to be due to shear-wave attenuation in the sample. Reliable measurements of attenuation can be made only if the sample is of correct shape and very carefully adjusted with respect to the radiator. The experimental errors decrease with the decrease of the losses on transformation of longitudinal into shear waves, and they are inversely proportional to the length of the sample and the number of passages between the measured pulses. By way of example Fig.3 shows the results obtained on magnesium alloys MA-3 (curve 1) and MA-2 (curve 2), and on fused quartz (curve 3). The direction of polarization in the two alloys was parallel to the direction of pressure on rolling of these materials. The dimensions of the samples were 15 x 25 x 90 mm. For MA-3 and MA-2 the range of frequencies employed was 5 - 30 Mc/s, and for fused quartz this range was 5 - 75 Mc/s. The errors in measurements were ± 1 db. The ordinate in Fig.3 gives the attenuation in db/m and the abscissa gives the frequency in Mc/s. Curve 4 in Fig.3 shows the data obtained by Mason

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SOV/46-5-2-21/34

On the Measurement of Shear-Wave Attenuation Using a Water Tank

(Ref.2) on fused quartz at frequencies below 20 Mc/s. The frequency dependence of attenuation of shear waves in fused quartz is linear, indicating that absorption is of predominantly hysteresis nature and that scattering on internal inhomogeneities is absent. Attenuation of shear waves in MA-3 and MA-2 rises very rapidly with frequency, indicating scattering of sound on internal inhomogeneities. Acknowledgment is made to V.S. Sharova for her help in measurements. There are 3 figures and 4 references, of which 2 are Soviet, 1 English and 1 translation of English into Russian.

ASSOCIATION: Kafedra akustiki Moskovskogo gosudarstvennogo universiteta
(Chair of Acoustics, Moscow State University)

SUBMITTED: April 28, 1958

Card 3/3

GONGHAROV, L., glavnyy inzhener.

Immediate task of improving technical training. Kinomekhanik no.11:42-43 N
'53. (MLRA 6:11)

1. Otdel kinofikatsii Voroshilovgradskogo oblastnogo upravleniye kul'tury.
(Moving-picture projection--Study and teaching)

GONCHAROV, L.

Federation of Nigeria. Vnesh. torg. 41 no.7:32-35 '61.

(Nigeria—Economic conditions)

(MIRA 14:7)

GONCHAROV, L.

United States monopolies in Africa. Vnesh. torg. 41 no.8:21-
28 '61. (MIRA 14:8)

(United States—Foreign economic relations—Africa)
(Africa—Foreign economic relations—United States)

MAKSIMOV, L.S., geofizik; GONCHAROV, L.A., geofizik

Natural oscillations of a spillway dam created by the impact of
waves. Gidr. stroi. 32 no.10:40-41 0 '61. (MIRA 14:10)
(Dams)

BIBANOV, V.I.; GONCHAROV, L.A.; KONSTANTINOV, B.B.; KRASHNIKOV, N.D.;
TISHCHENKO, V.G.

Experimental study of the vibrations of massive concrete blocks
on sand bases. Trudy Inst. fiz. Zem. no.33. Vop. inzh. seism.
no.9:59-76 '64. (MIRA 17:12)

... have a tendency to form networks made up of intersecting rows of

Card 1/2

L 39777-66 ENT(m)/ENT(f)
ACC NR: AT6012692

CD-2

SOURCE CODE: UR/3136/65/000/991/0001/0044

AUTHOR: Goncharov, V. V.; Babulevich, Ye. N.; Shavrov, P. I.; Ryazantsev, Ye. P.
Novikov, I. M.; Yegorenkov, P. M.; Chervyatsov, A. A.; Frolov, I. P.; Zhigachev,
V. M.; Pushnin, B. T.; Fischevskiy, V. K.; Zakharov, L. K.; Kruglov, A. B.; Karasev,
N. A.; Goncharov, L. A.

ORG: State Committee on the Use of Atomic Energy SSSR, Institute of Atomic Energy
im. I. V. Kurchatov, Moscow (Gosudarstvennyy komitet po ispol'zovaniyu atomnoy
energii SSSR, Institut atomnoy energii)

TITLE: Experience in operation of the MR reactor and tests of fuel elements and materials

SOURCE: Moscow. Institut atomnoy energii. Doklady, no. 991, 1965. Opyt eks-
pluatatsii reaktora MR i provedeniye ispytaniy TVEL i materialov, 1-44.

TOPIC TAGS: nuclear research reactor, reactor fuel element, nuclear reactor
material, nuclear reactor characteristic

ABSTRACT: The authors discuss the loop research reactor MR constructed at the
Kurchatov Institute of Atomic Energy and intended for the test of fuel elements
and materials in new atomic installations. It is described in paper P/323 of the
Third Geneva Conference in 1964. The present article describes in detail its con-

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1. 30777-65
ACC NR: AT60.12692

struction and the various test loops in it. The section headings are: I - Introduction. II. Operation of reactor. 1. Certain physical characteristics of the reactor. a) Fuel burnup. b) Efficiency of control valves, scram rods, and movable fuel assemblies. c) Fluxes of thermal and fast neutrons. 2. Control and protection system of the reactor. 3. Technological systems of the reactor. a) Cooling loop for fuel element assembly. b) Cooling loop for the reactor assembly blocks. c) Intermediate (second) cooling loop of reactor. d) Third cooling loop of reactor. e) Water purification system. 4. Fuel assembly operating conditions and conditions for the graphite stacking blocks. 5. Reloading operations. III. Operation of loop installations. Organization and performance of tests on fuel elements and materials. IV. Dosimetric control. Radiation shielding of reactor. The reactor has been in operation since 24 July 1964, and its power has been gradually increased from the initial 20 MW to 30 MW. The usual operation is at 25 MW. The reactor has 3 loop channels with 7 associated experimental channels. Various characteristics of the reactor at different power ratings are tabulated. Major contributions to the adjustment of the MR reactor were made by A. Ye. Alekseyev, B. A. Alekseyev, S. N. Begichev, A. B. Bugayenko, Yu. I. Kovalev, V. K. Lebedev, A. M. Rotankov, V. D. Rusov, N. V. Sarychev, Ye. S. Chernorotov, and Yu. A. Shikov.
Orig. art. has: 13 figures and 6 tables.

SUB CODE: SUBM DATE: 00/ ORIG REF: 001

Card 2/277213

GONCHAROV, L.B.

Labor of Kazakh road builders serves the prosperity of the
Republic. Avt.dor. 24 no.6:1-4 Je '61. (MIRA 14:7)

1. Nachal'nik Glavnogo upravleniya shosseynykh dorog pri Sovete
Ministrov Kazakhskoy SSR.

(Kazakhstan—Road construction)

GONCHAROV, L.B.

Highway-construction workers in Kazakhstan contribute to the development of the national economy of the republic. Avt.dor. 25 no.4:1-3 Ap '62. (MIRA 15:5)

1. Nachal'nik Glavnogo upravleniya shosseynykh dorog pri Sovete Ministrov Kazakhskoy SSR.
(Kazakhstan--Roads)

DALMATSKAYA, Ye.I. Primali uchastiye: GONCHAROVA, L.G., mladshiy nauchnyy
sotrudnik; ZHELEBOVA, V.K.; BOGDANOVA, N.V., laborant

Kinetics and statistics of the carbonization of sodium silicate
solutions. [Trudy] NIOKHIM 15:83-96 '63.

(MIRA 18:2)

28840

S/169/61/000/004/022/026
A005/A130

3,5/31

AUTHOR: Goncharov, L.P.

TITLE: Analysis of cases of triple splittings of altitude-frequency characteristics from observations at Irkutsk (Zuy)

PERIODICAL: Referativnyy zhurnal. Geofizika, no. 4, 1961, 43, abstract 4 G 314.
(Tr. Sibirsk. fiz.-tekhn. in-ta pri Tomskom un-te, 1959, no. 37, 322 - 325)

TEXT: It follows from the Appleton-Hartree equation for the index of refraction of a scattering medium taking into account the influence of the earth's magnetic field that the probability of appearance of the z-component is determined by the value of angle Θ (between the normal to the wave front and the direction of the earth's magnetic field H) and by the gradient of electron concentration in the region of reflection. Since the intensity of the z-component decreases with increasing Θ and decreasing gradient, the triple magnetic ionic splitting according to the theory without taking collisions into account can be observed only in regions with $\Theta < 5^\circ$. There exists, however, another possibility of theoretical explanation of the instances of z-reflection observed at middle

Card 1/2

28840

S/169/61/000/004/022/026
A005/A130

Analysis of cases of triple splitting of....

latitudes: percolation of wave energy into the region $n < 0$ incident to the presence of high gradients of electron concentration. Observations at Irkutsk ($\Phi = 41^\circ$) revealed a number of cases of triple magnetic ionic splitting. On carefully checking the altitude-frequency characteristics for 1948 - 1956, the author culled 10 characteristics with triplets. The epoch superposition method showed that the appearance of triplets is preceded by a decrease of f_oF_2 . In the hours following the appearance of the triplets, f_oF_2 returns to normal values. The curve of the diurnal variation of triplets has a maximum at 11 o'clock local time; the seasonal variation has a minimum in summer and a maximum in winter. In order to obtain more reliable data on triplets, measurement of component polarization is necessary.

N. Potapova

JK

[Abstracter's note: Complete translation.]

Card 2/2

S/169/61/000/010/028/053
D228/D304

AUTHORS: Vasil'yev, G. V., Vasil'yev, K. N., and Goncharov, L. P.

TITLE: Automatic panoramic ionosphere station of the AMC (AIS)
type

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 10, 1961, 2,
abstract 10G15 (Geomagnetizm i aeronomiya, 1, no. 1,
1961, 120-127)

TEXT: The design and operating principle of a station of the AMC (AIS)
type are described in general outline. A series of such stations were
prepared in the USSR for equipping the network of observatories taking
part in the I.G.Y. and I.G.U. The brief technical data for the station
are: output power of 5 - 10 kW ; linear frequency-band of 1 - 10 or 1 -
18 Mc/s ; overlap time-range of 20 sec.; impulse duration of 50 - 70 μ sec.;
repetition frequency of 50 pulses/sec.; frequency marks through 1 Mc/s ;
height marks through 50 km; linear frequency-band of 0 - 250, 0 - 750, and

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D228/D304

Automatic panoramic...

0 - 1500 km; general heterodyne tuning for the transmitter and receiver; receiver sensitivity of 10 μ V ; passage band at the 0.7 - 20 kc/s level; program of automatic operation after 60, 30, and 15.5 min. or continuously; B-type indicator in a tube with a diameter of 25 cm; recording on 35-mm film; antennas with two vertical rhombs in the range of 1 - 6 and 5 - 18 Mc/s ; alternating single-phase charging voltage of 180 - 230 V and 50 c/s ; input of 1.7 kW. The photography, block-circuit, specimen ionograms and outline of the antenna layout are given. The described station's advantages are: the high output power, the presence of two frequency bands, the indicator with a large screen, the simplicity of the circuit, the small size and weight, the effective antenna system, and also the high operational reliability. In the constructional respect, the most original units developed by the authors include: the modulator, which guarantees the transmitter's reliable and qualitative working; the simple and reliable scheme of automation, based on the use of a standard КПЧ (KPCh) contact-actuating clock; and also the extremely effective antenna-system for the wide frequency-band. The station's outfit--which together with the spare

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parts and instrument includes a set of measuring devices, a fully equipped antenna-system, a power plant, appliances for developing the photographic film, etc.--enables it to be deployed at any site. [Abstracter's note: Complete translation.]

Card 3/3

VASIL'YEV, G.V.; VASIL'YEV, K.N.; GONCHAROV, L.P.

Automatic panoramic ionospheric station of the AIS type.
Geomag. 1 aer. 1 no.1:120-127 Ja-F '61. (MIRA 14:7)

1. Kazakhskiy gosudarstvennyy universitet imeni S.M. Kirova.
(Solar radiation)
(Radio astronomy)
(Magnetic fields (Cosmic physics))

9.9842

S/169/62/000/010/061/071
D228/D307

AUTHOR:

Goncharov, L.P.

TITLE:

Ionospheric research on the schooner "Zarya" in
1960-1961

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 10, 1962, 4,
abstract 10631 (Geofiz. byul. Mezhdoved. geofiz.
kom-t pri Prezidiume AN SSSR, no. 11, 1962, 49-54)

TEXT:

A survey of the magnetic field in the water area of
the Pacific Ocean was made in the period 1960-1961. Registration
of the nucleon component of cosmic rays was carried out at the same
time, as was vertical ionospheric sounding. The program of the lat-
ter included the obtaining of the high-frequency characteristics of
the ionosphere and the preparation of f-diagrams and tables of the
monthly critical frequency values. Many nomograms, characterizing
the state of the ionosphere on the travel line, were obtained. A
strongly changeable diurnal variation of critical frequencies of the
F2 layer was recorded in the vicinity of the South China Sea when

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Ionospheric research ...

S/169/62/000/010/061/071
D228/D307

the ionosphere's state was quiescent. An indistinctly expressed diurnal variation of critical frequencies of the F1 layer is characteristic of all the f-diagrams. Four graphs, illustrating the circumstances mentioned above, are given.

[Abstracter's note: Complete translation]

Card 2/2

CHANYSHOV, R.O.; ~~GONCHAROV, L.T.~~ [Moncharov, L.T.], inzh.-elektrik

Experience in using electric water heaters. Mekh.sil'.hosp.
11 no.2:23-24 F '60. (MIRA 13:6)

1. Glavnyy inzhener sovkhoza "Metalist" (for Chanishev).
(Water heaters)

GONCHAROV, L.V., otv. red.; MARTYNOV, V.A., red. SVANIDZE, I.A.,
red.; KARTUZOV, S.P., red.; KOZLOVSKAYA, G.M., red.

[Economics of Africa] Ekonomika Afriki; sbornik statei.
Moskva, Nauka, 1965. 174 p. (MIRA 18:9)

1. Akademiya nauk SSSR. Institut Afriki.

TRET'YAKOV, Pavel Nikolayevich; GONCHAROV, L.V., otv. red.;
SHTEMPEL', M.I., red.; YAZLOVSKAYA, E.Sh., tekhn. red.

[Economic independence and two types of aid to African
countries] Ekonomicheskaya nezavisimost' i dva vida pomo-
shchi stranam Afriki. Moskva, Izd-vo vostochnoi lit-ry,
1963. 100 p. (MIRA 16:4)

(Africa--Economic conditions)

(Africa--Economic assistance, American)

(Africa--Economic assistance, Russian)

GONCHAROV, Leonard Vasil'yevich; KIRICHENKO, Galina Abramovna;
TRET'YAKOV, P.N., otv. red.; PAVLOV, A.G., red.;
YAZLOVSKAYA, E.Sh., tekhn. red.

[The "Common Market" and African countries] "Obshchii rynek"
i strany Afriki. Moskva, Izd-vo vostochnoi lit-ry, 1963. 70 p.
(MIRA 16:4)

(European Economic Community countries--Foreign economic relations--
Africa)

(Africa--Foreign economic relations--European Economic Community
countries)

NR1 AP5019099

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

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Fig. 1. 1- baffle; 2- cylindrical protrusion; 3 and 4- ducts;
5- rod; 6- cylindrical recess

Card 3/3

GONCHAROV, M., kand. ekon. nauk

Originator of the canning of meat in Russia. Mias. ind. SSSR
29 no.2:29-30 '58. (MIRA 11:5)
(Meat, Canned) (Kazarin, Vasilii Nazar'evich, 1773-1842)

LADUR, M., zasluzhennyy deyatel' iskusstv RSFSR; GONCHAROV, A.; khudozhnik;
VAKS, I., dots.; GONCHAROV, M., inzh.; BORUSHKO, N., khudozhnik-
arkhitektor; PAKHOMOV, V., student; BELOKOPYTOV, A., student

Beauty in labor. Tekh.mol. 28 no.7:2-4 '60. (MIRA 13:8)

1. Leningradskoye vyssheye khudozhestvenno-promyshlennoye uchi-
lishche (for Vaks, Pakhomov, Belokopytov).
(Aesthetics) (Color--Psychology)

PONOMAREV, A., general-polkovnik inzhenerno-tekhnicheskoy sluzhby;
 POKROVSKIY, G., prof., doktor tekhnicheskoy sluzhby;
 KUVAL'DIN, A., dots., kand. tekhnicheskikh nauk inzhener-
 polkovnik; MOSTOVENKO, V., dots., kand. tekhnicheskikh nauk
 inzhener-polkovnik; GONCHAROV, M., polkovnik; TARANTSOV, A.,
 polkovnik; VASIL'YEV, N., polkovnik; GORDEYEV, N., kapitan 1
 ranga; KOZIN, K., kapitan 1 ranga; ARKHIPOV, M., dots., kand.
 tekhn. nauk inzhener-podpolkovnik; SEDOV, A., dots., kand.
 tekhn. nauk, inzhener-podpolkovnik; MELIK-PASHAYEV, N., dots.,
 kand. tekhn. nauk, inzhener-podpolkovnik; TIKHOMIROV, Yu., dots.,
 kand. tekhn. nauk, inzhener-podpolkovnik; PARFENOV, V., kand.
 tekhn. nauk, inzhener-podpolkovnik; GEORGIYEV, A., inzh.-pod-
 polkovnik; KRUCHININ, V., inzh.-podpolkovnik; MEKONOSHIN, N.,
 inzh.-podpolkovnik; RYKOV, S., inzh.-podpolkovnik; SURIKOV, B.,
 inzh.-podpolkovnik; ZHUKOV, V., inzh.-mayor; NOVIKOV, M., inzh.-
 mayor; SUSHKOV, Yu., inzh.-kapitan; ASTASHENKOV, P.T., inzh.-
 podpolkovnik; VASIL'YEV, A.A., red.; KARYAKINA, M.S., tekhn.
 red.

[New advances in military technology for youthful readers] Mo-
 lodezhi o novom v voennoi tekhnike. Moskva, Izd-vo DOSAAF,
 1961. 342 p. (MIRA 15:2)

(Rockets (Ordnance)) (Atomic weapons)
 (Electronics in military engineering)